National Aeronautics and Space Administration

IT Talk

Issue 5
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this issue

Office of the Chief Information Officer
NASA CIO: Linda Y. Cureton

IT Summit Fast Facts

- 941 attendees
- 23 exhibitor booths
- 118 speakers at 63 breakout sessions
- 575 people tweeting and 1,480 tweets using "#NASAit"

Photos, presentations and videos of the Summit are available at:

www.nasa.gov/offices/ocio/itsummit/

First NASA IT Summit Explores Tech Innovations

NASA's first IT Summit brought together 941 people to explore the outer reaches of information technology from August 16 to 18 at the Gaylord National Harbor in Maryland.

Presenters from around the country shared their expertise on themes ranging from social networking and green IT to innovation, infrastructure, operations and IT security and privacy.

After the public event, NASA IT staff convened meetings for the IT Management Board, The Chief Technology Officer (CTO) Council, Deputy CIO Council, and 17 NASA IT working groups. Because of the critical mass of NASA IT staff gathered in one place, many working groups were able to have face-to-face, cross-functional meetings for the first time. For example, the ODIN Program Board, the Postmasters Working Group, NOMAD Customer Advocacy Council, the Public Key Infrastructure Group and the OCIO Strategic Communications Committee held their first joint meeting to discuss improving IT communications across the Agency.

"The 2010 IT Summit helped us get closer to those goals through the sharing of IT innovations across the Agency while learning from the efforts of other agencies and the private sector. I have no doubt this Summit was a critical step in strengthening our IT operations and achieving my vision to have the best IT organization in the Federal government," said NASA CIO Linda Cureton.

"This Summit has enabled us to work and exchange innovative ideas in a more collaborative and transparent fashion. We promoted integration and communication within NASA by bringing together our own IT community across all Centers, all at once. Opening our Summit to renowned IT professionals such as the 'Father of the Internet' as well as other Federal CIOs, private sector, academia and researchers, has infused new best practices and cross pollination throughout the IT community," said NASA Deputy CIO Deborah Diaz.

Plans are under way for a 2011 Summit in San Francisco from August 15 to 17.

Check out features throughout this issue devoted to the IT Summit, including quotes from our featured speakers (page 2) and insights on the future of NASA IT from NASA CIOs (page 4).

Headlines from the Summit

"NASA Aims To Be Government's 'Best IT Organization,'" *InformationWeek*

"Kundra Challenges Feds To Spend Smarter on IT," *Info Week*

"IT Chief Could Shift Funds for Agencies' Internal Tech Projects," *Nextgov*

"NASA Sets Its Sights on Off-loading IT Functions and Boosting Security," *Nextgov*

"NASA in Position To Foster Global Cybersecurity," *InformationWeek*

"Bolden Comments on Employees, Contractors at NASA IT Summit," *Federal Computer Week*

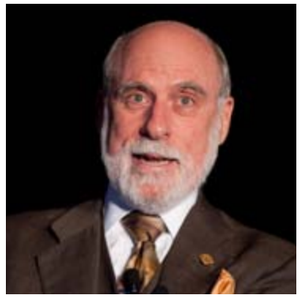
Heard at the Summit...

"We come from different parts of the country but are united in our commitment to providing NASA the finest IT and use of technology to enable our mission. With President Obama's new initiative for space exploration, we must be able to overcome the challenges that lie ahead."

—Linda Cureton, CIO, NASA

"…[I]n the Obama administration, we're focusing on how to turn around how we're spending money to make sure that the projects are providing dividends for the American people. The first thing is that we launched the IT dashboard within 60 days. There are a number of accomplishments that move us closer to making sure that we have a higher statistical likelihood that projects will deliver. When we launched the dashboard, it was a huge shift. We moved from an environment that was closed, opaque, to an environment that became transparent, open. The challenge was shining light on over $76 billion on IT investments."

—Vivek Kundra, CIO of the United States



"NASA has been very successful, precisely because its scientific missions have been mission-centric—managed in a mission-centric way, focused. However, in the IT department, one of the missions of IT is to support all of those scientific missions. You are an infrastructure. That means, in many cases, designing and building systems that are multimission in nature. So one of the key points I hope you will take away from my presentation is that designing communication and information infrastructure architectures must be viewed from a multimission point of view because you have to persist over many different missions."

—Vint Cerf, Vice President and Chief Internet Evangelist, Google

"…[T]he applications marketplace is changing radically. The end game is very interesting. First off, we will get to something called applications components as a service, where I won't buy an ERP [Enterprise Resource Planning] system, but bits and pieces of systems, and use them when I need them. That happens today…. But that's not the ultimate endgame, the ultimate endgame is applications will go away."

—James Stikeleather, Chief Innovation Officer, Dell Services

"It's critical to realize that cyberspace is a central nervous system of today's advanced economics. The global information and communications infrastructures are highly interconnected across borders and jurisdictions and threats to all legitimate activities in cyberspace are global and transnational in nature."

—Mark Bregman, Chief Technology Officer, Symantec

"The PC era is over. It's 1981 again! What the heck do you mean by that, Dave? What I mean is in 1981, the IBM personal computer was released. That was an ignition point. From 1981 all the way up to the present, we had the PC era. It wasn't just about individual PCs—it changed the way we talked about computing. I would even say getting into the Internet and the web was a way of linking these systems together. When we start looking at mobile computing, we're seeing another change in the market place. We're now shifting to a mobile environment, an embedded system model being the focal point."

—David W. Cearley, Vice President and Gartner Fellow in Research, Gartner, Inc.

Videos of many of the IT Summit speakers can be viewed at www.nasa.gov/offices/ocio/itsummit/

NASA App HD Now Available for iPad

The NASA App HD invites you to discover a wealth of NASA information right on your iPad. The application collects, customizes and delivers an extensive selection of dynamically updated mission information, images, videos and Twitter feeds from various online NASA sources in a convenient, mobile package. It's available free of charge on iTunes or in the App Store directly on the iPad. More information can be found at:

www.nasa.gov/nasaapp

Glenn Sustainability Summit

The NASA Glenn Research Center had a three-day Sustainability Summit September 14 to 16, 2010 thanks to the collaborative effort between the ODIN Lockheed Martin staff and the Safety, Health and Environmental (SHED) team. The Summit highlighted green initiatives and featured hands-on demonstrations, vendors and breakout sessions on topics ranging from waste reduction strategies to environmentally friendly computing and office supplies.

2020 Vision

We asked some of our NASA CIOs their vision for NASA's IT by 2020.

"My vision is to create the best IT organization in the Federal Government well before 2020. This is a vision based on project execution, results, innovation and value to the mission. For NASA this means improved IT management and planning, including the implementation of a strong enterprise architecture and governance process to optimize the mission. In order to look at that future, we need to look at IT across the Federal Government, not just at NASA. We need to look at how to use technology and how to use innovation, manage IT to the betterment of the citizens and what we need to do as a country."

— Linda Cureton, NASA

"I see NASA's IT as a combination of value-added services and managed services. The value-add consists of solutions which are unique, versus commodity-like. These solutions can be accessed from anywhere on any computing device. These solutions will be a combination of services outside of and within NASA. Commodity solutions will be completely outside of NASA and more utilitarian in nature. Yes, the cloud will be mature enough to provide infrastructure services of all types. Development tools for the end users will be easy to use. IT organizations will be responsible for configuring these capabilities, developing strategies and ensuring that emerging technologies are beneficial to NASA. Additionally, the current gap between mission IT and administrative IT will be non-existent. Special IT for missions will be in the architecture of IT, and skills will be transportable."

— Jim Rinaldi, Jet Propulsion Laboratory

"IT will play a major role in the next 10 years by significantly reducing waste while increasing efficiencies throughout our Federal Government. We envision deployment of a comprehensive set of collaboration tools, allowing for a variety of secure, on-demand communication from any location, featuring built-in records management. Video and audio conferencing, IM, e-mail and file sharing should be available from any device, any location, any time."

— James Williams, Ames Research Center

"Anytime, anywhere collaboration and access to information."

— Cathy Mangum, Langley Research Center

"In 2020, IT will be integrated into our work environment to the point that it is almost transparent. Our employees will take IT for granted as they use a variety of mobile devices to connect to global networks to access applications and data whenever and wherever they want. The CIOs will leverage customer relationship managers, enterprise architects, and solution architects to work closely with the missions to understand and meet all their needs. The missions will consider the CIO offices close strategic partners as they jointly solve the aerospace problems of the future."

— Michael Bolger, Kennedy Space Center

"With its world-class personnel, science, and technology capabilities, the Goddard Space Flight Center enjoys an exceptional heritage at the cutting edge of space and environmental science. Moore's Law predicts that by the year 2020, Goddard computing capability will be five times more powerful than today. Whether in the form of quantum computing or another advanced capability, GSFC's information technologies will enable more powerful sensors, producing exponentially more detailed data, which will be interpreted through even more sophisticated modeling.

In 2020, the GSFC team will still be driving the means by which mankind observes, measures, and predicts the state of our global environment; the understanding of our Sun, solar system, and the beginnings of our universe; and the identification of exoplanets capable of sustaining life. The attainment of that knowledge will continue to improve the lives of millions, sustain and advance our national economy, and fire the imaginations of a new generation of scientific leaders. And I believe that information technology will continue to be a tool to sustain and enrich that effort."

— Adrian Gardner, Goddard Space Flight Center

2010 IT Summit Award Winners

On August 18 at the Summit outside of Washington, DC, NASA presented these awards to recognize outstanding efforts by the NASA IT community as well as members of the academic and teaching community who have incorporated NASA technology into their educational efforts.

OCIO Excellence in Leadership: James Williams
James Williams models transformational leadership qualities at NASA through his innovative work including helping launch NASA's Nebula, a cloud computing initiative.

OCIO Excellence in Customer Service: Linda McMillen
Linda McMillen embodies a "customer-obsessed" attitude through her work, which includes chairing the NOMAD Customer Advisory Council, which, under her leadership, prioritized areas to better-serve NASA customers and their e-mail needs.

OCIO Excellence in Teaching: Pam Leestma and Neme Alperstein
Pam Leestma and Neme Alperstein won for their unique team teaching approach that uses technology to connect their sixth- and second-grade students in California and New York. Their students have interacted with astronauts and scientists using podcasts, video conferences, webcasts, blogs, websites and virtual field trips.

OCIO Mentor: Herbert W. Schilling
Herbert W. Schilling has been an advisor and mentor for many NASA science, technology, engineering and math outreach efforts with high school students including the Glenn Research Center Explorer Program and Young Astronaut Day. He also serves as a mentor and coach for NASA employees.

OCIO Humanitarian Award: Ernest Lopez
Ernest Lopez has demonstrated significant, enduring contributions to humanity through his extensive efforts helping underserved people in the US and Mexico. He has mentored students, helped rebuild orphanages, and assisted in migrant camps in Mexico. When home, he volunteers at a regional food bank in San Jose, CA.

OCIO Excellence in Innovation: Michael Seablom
Michael Seablom has been a leader in the development of the Climate@Home prototype. Climate@Home is a project to evaluate climate change forecasts using the idle capacity of a global network of computers offered by volunteers, instead of traditional supercomputers.

OCIO Faculty Research Award: Dr. Carl White
Dr. Carl White won the award for innovation in his NASA-related research at Morgan State University.

OCIO Excellence in IT Security: Joseph Rossoll
Joseph Rossoll demonstrated outstanding contributions to the advancement of information security. He is a nationally recognized leader and NASA resource in real-time data systems and data security.

OCIO Advancement in Infrastructure or Cost Savings Award: Grace DeLeon
Grace DeLeon's efforts on the Ames Research Center local area networking upgrades have saved costs by reducing redundancy while providing the capability of increasing bandwidth without added infrastructure.

OCIO Student Innovator: Danielle Wood
Danielle Wood won for inspiring the K–12 and peer community through NASA-related outreach activities and educational interactions as an intern with NASA's Innovative Partnership Program at GSFC and NASA Headquarters and as a NASA Student Ambassador.

(Left to right): Herbert W. Schilling, Michael Seablom, Linda McMillen, Grace DeLeon, Joseph Rossoll, Linda Cureton, Ernest Lopez, Pam Leestma, James Williams, Neme Alperstein, Dr. Carl White, Danielle Wood and Deborah Diaz

Remember to Practice Good Records Retention

Management of Federal records, both physical and electronic, is the legal responsibility of all Federal employees and many contractors. NASA is currently enhancing requirements and tools to facilitate better records management at the Agency.

Stennis Space Center Opens Records Facility

NASA's John C. Stennis Space Center cut the ribbon August 24 on a new, storm-resistant Records Retention Facility that consolidates and protects records storage at the nation's premier rocket engine test facility. This facility will also house history office operations.

"The opening of this dedicated records storage facility emphasizes the importance of record retention and data management," said Stennis Chief Information Officer Dinna Cottrell. "This facility ensures the required Federal records are preserved, managed and accessible to all interested personnel."

The new storage facility will house and protect the history and the historical documents related to Stennis and its rocket engine test work. It was designed to meet all specifications and storage criteria set forth by the National Archives and Records Administration (NARA). With completion of the new building in May, Stennis became the first NASA Center to open a NARA-compliant storage facility.

Participants in the ribbon-cutting event (included from left to right): *Stennis Center Operations Deputy Director Gay Irby, NASA Chief Information Officer Linda Cureton, Stennis Director Patrick Scheuermann, NASA Chief Archivist Jane Odom, Stennis Chief Information Officer Dinna Cottrell and Stennis Deputy Chief Information Officer James Cluff.*

Stennis leaders used Hurricane Katrina mitigation funds to renovate an existing building to meet the new codes. The 2005 storm damaged several Stennis facilities that previously housed records, highlighting the need for a more protective storage environment.

The records retention facility now serves as a central location for all NASA records at Stennis. It allows for maximum efficiency by combining records and records management personnel in the same location. The facility can accommodate 20,000 cubic feet of records storage and offers storm-resistant protection.

Launching Conversations: Marshall's Video Blog

by Emily Townsend, Strategic Communications Team Lead, Schafer Corporation/MSFC

At Marshall Space Flight Center (MSFC), the Office of the Chief Information Officer (OCIO) teamed up with the Office of Strategic Analysis and Communications (OSAC) to create a new vehicle encouraging better and more frequent two-way communication between MSFC's Director and employees. The online video blog called "Launching Conversations" began in September 2009.

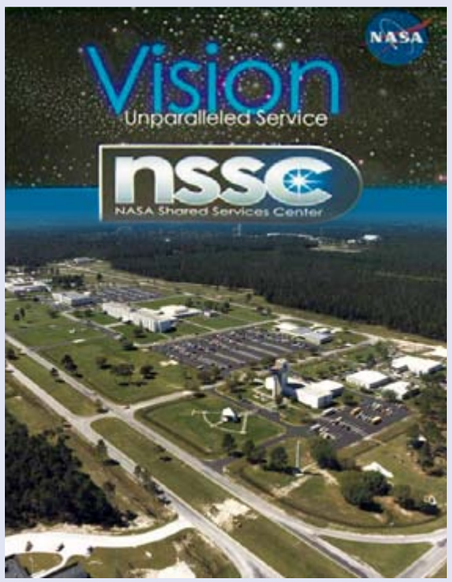
This forum includes a regularly recorded video message from Marshall Center Director Robert Lightfoot to Center employees providing insights into current events, Center or Agency initiatives and other topics of interest. The site also includes a blog, which employees are encouraged to use to discuss subjects presented in the Center Director video or any other topics.

From its start during the time of the Human Spaceflight Review, the blog was initially used to help keep Marshall employees up to date about the progress of the review. Since then, the blog has evolved into an interactive forum for employees to share open dialog with the Center Director and each other about a diverse range of topics.

Employees are encouraged to openly share their ideas, opinions, concerns or questions on the blog.

The Center Director videos are recorded and produced by Marshall's television services. Filming takes place in the Center Director's office, in the television studio or on location. Offsite production allows the opportunity to share Marshall's unique facilities with employees and provide insight into ongoing work around the Center. Lightfoot has recorded videos at both the Ares 1-X Launch Pad and the Lunar Lander Test Bed. Future plans include recording at other worksite locations as often as feasible.

Blog posts by individual users are read frequently by Marshall's leadership team, who then provide responses. . Launching Conversations has proven to be a successful tool for Marshall's Center Director and employees. Within the first four months of operations, more than 5,000 of Marshall's nearly 7,000 employees visited the site. Responses continue to be overwhelmingly positive.



NSSC Upgrades Online Services

www.nssc.nasa.gov/customerservice

The NASA Shared Services Center (NSSC) has increased its focus on providing self-service opportunities to NASA employees. The NSSC Information Center is a new, web-based tool that puts nearly 1,000 Frequently Asked Questions (FAQs) at the fingertips of website end users. FAQs can be searched and browsed by category.

End users have the ability to rate FAQs and provide feedback so that content weaknesses can be addressed. The feedback can be provided anonymously and takes only seconds to share. There is also a convenient method for electronically submitting a help desk case to have a specific issue addressed by the Customer Contact Center.

The NSSC Information Center provides a significant upgrade to the NSSC's website's search capabilities. The software crawls knowledge articles, web content, and public documents in the NSSC TechDoc electronic library. This enhancement will allow end users to find Service Delivery Guides, reference materials, and other documents with ease. The improved site search will also simplify site navigation and help to ensure that customers find the specific page they need.

Future upgrades will allow employees to create a personalized account, subscribe to FAQs and receive notifications when they are updated or changed.

JPL Network Engineer Recognized as Rising Star

The 2010 Rising Star awards program recognized Joy Laibl, the manager of the Network Engineer Group with Office of the Chief Information Officer of NASAs Jet Propulsion Laboratory (JPL).

The annual award, cosponsored by Federal Computer Week, Government Computer News (GCN) and Washington Technology, selected 24 up-and-coming professionals in Government IT who have made "an early—and substantive—mark in the government IT community."

Laibl's work includes performing assessments of supercomputing architectures, mass storage, networking, visualization and audio and video post-production hardware and software, in addition to making recommendations on emerging network technologies.

2010 IT Showcase at Langley

Langley Research Center (LaRC) held an ODIN Information Technology Showcase on Thursday, July 22 to focus on the benefits of "green IT." The event, which hosted 476 employees, highlighted products and services available through ODIN, along with new, innovative products and technologies from several ODIN vendors such as Lockheed Martin, Apple, Verizon, Microsoft, AT&T, HP and Dell.

Top row (left to right): *NASA Administrator Charles Bolden and CIO Linda Cureton officially open the exhibitor area; Google's Vint Cerf gets down into the audience to answer questions.*

Middle row: *NASA Deputy Associate Administrator for Communications Alan Ladwig announces IT award winners; NASA staff tour the exhibit and "Petting Zoo" area; a robot at the exhibit area.*

Bottom row: *NASA Deputy CIO Deborah Diaz talks with NASA CTO for IT Chris Kemp via an "Anybot" with a video monitor on its "head" and wheels that Kemp could control from his location in California; IT Awards; Vernice "FlyGirl" Armour gives a talk called "Zero to Breakthrough Mentality" at the awards luncheon.*

Send feedback about *IT Talk* to John Hopkins at john.hopkins@nasa.gov.

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